

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re patent application of:

Randell L. Mills

Serial No. 09/220,970

Filed: December 23, 1998

Title: A METHOD AND SYSTEM FOR PATTERN RECOGNITION AND PROCESSING



Group Art Unit: 2624

Examiner: W. Chen

Attorney Docket: 62-231

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MAR 04 2002
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February 27, 2002

AMENDMENT TO REDUCE ISSUES FOR APPEAL

Assistant Commissioner for Patents
Washington, D.C. 20231

Sir:

In partial response to objections in paragraph Nos. 6 and 7 in the Office Action dated July 19, 2001, and to reduce the issues for Appeal, please enter the following amendments and remarks:

IN THE CLAIMS

Please amend claims 79, 127 189, 229-237, 240, and 294 as follows:

79. (Amended) A method according to claim 51, wherein the Fourier series in Fourier space, has a characteristic modulation having a frequency within the band represented by $e^{-jk_p(\rho_{j\theta_m} + \rho_{l_m})}$ and is selected from one of:

$$\sum_{m=1}^M \sum_{n=-\infty}^{\infty} \frac{4\pi}{1 + \frac{k_z^2}{k_p^2}} a_{0_m} N_{m_{\rho_0}} N_{m_{z_0}} e^{-jk_p(\rho_{j\theta_m} + \rho_{l_m})} \sin\left(k_p \frac{N_{m_{\rho_0}} \rho_{0_m}}{2} - n \frac{2\pi N_{m_{\rho_0}}}{2}\right) \sin\left(k_z \frac{N_{m_{z_0}} z_{0_m}}{2} - n \frac{2\pi N_{m_{z_0}}}{2}\right)$$

and

$$\sum_{m=1}^M \sum_{n=-\infty}^{\infty} \frac{4\pi}{1 + \frac{k_z^2}{k_p^2}} a_{0_m} \frac{4}{\rho_{0_m} z_{0_m}} e^{-jk_p(\rho_{j\theta_m} + \rho_{l_m})} \sin\left(k_p \frac{N_{m_{\rho_0}} \rho_{0_m}}{2} - n \frac{2\pi N_{m_{\rho_0}}}{2}\right) \sin\left(k_z \frac{N_{m_{z_0}} z_{0_m}}{2} - n \frac{2\pi N_{m_{z_0}}}{2}\right)$$